

The ultimate 4WD Radio Control Car

Pack 1

Stages 1-5





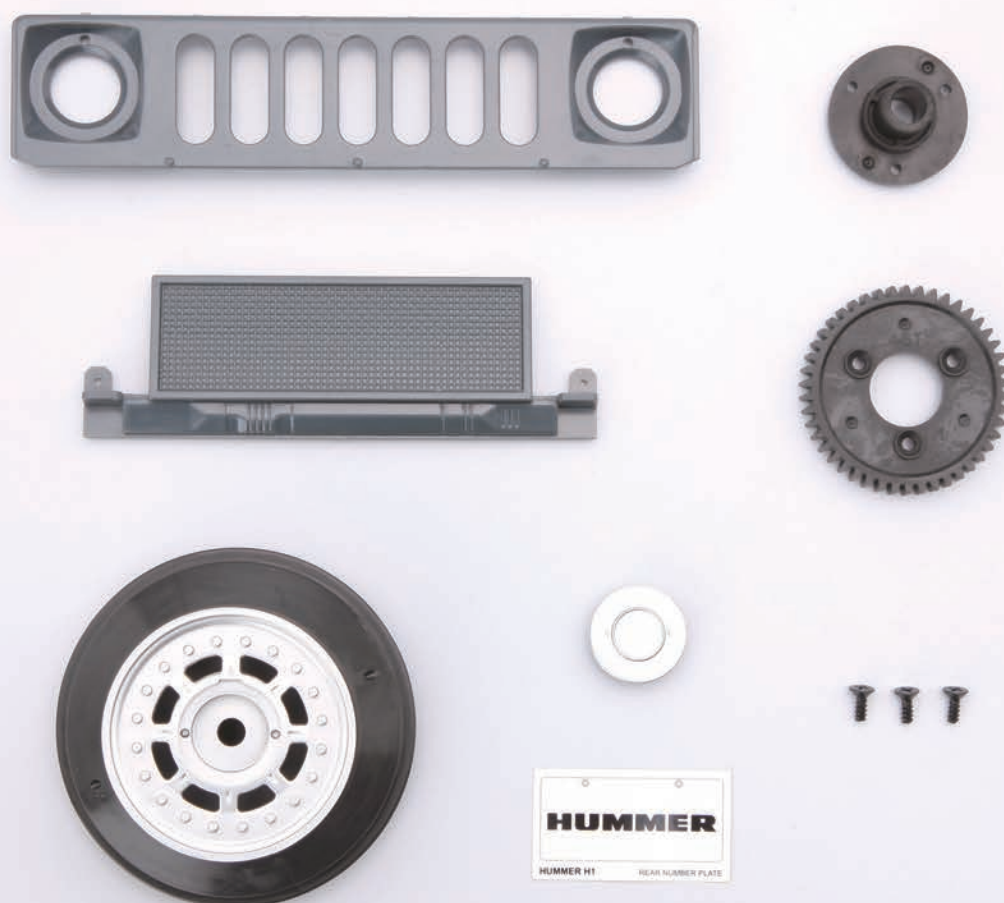
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Stage 1

Assembling the 46T gear and front grill

Your parts



Front grill
Grill mesh
Gear holder
46T gear

Wheel
Hubcap
3 x 8mm self-tapping screws x 3
Number plate sticker

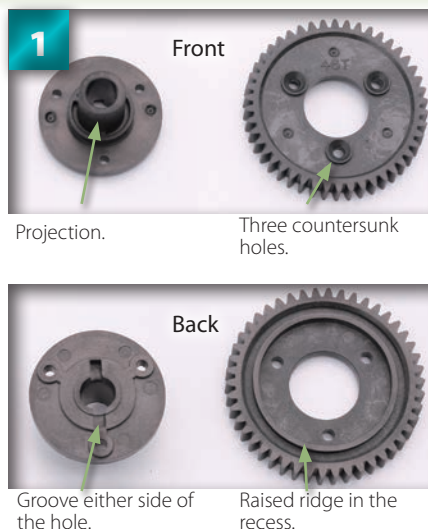
Tools and materials

Phillips screwdriver
File or wet and dry paper (800 grit)

HUMMER H1: STEP BY STEP

Assembling the 46T gear and holder

These photos will help you to identify the front and back of each component.



Place the projection on the front of the gear holder into the hole in the 46T gear, inserting it from the back.



Align the three holes in the holder with the three countersunk holes on the gear.



Push the gear holder and gear together firmly until there are no gaps between them.



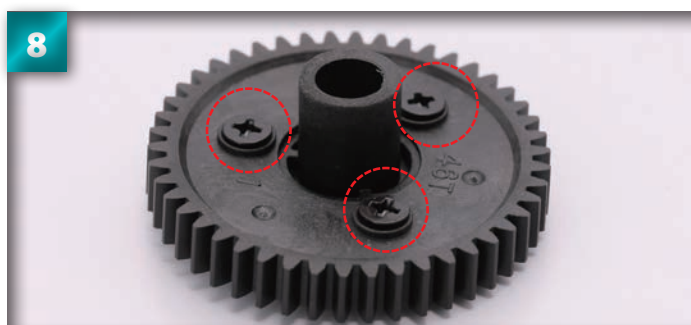
Insert one of the screws into one of the countersunk holes on the front of the gear.



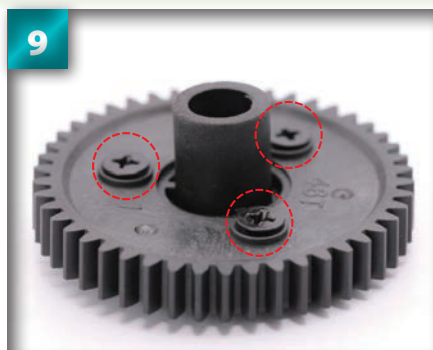
Use a size 2 Phillips screwdriver to tighten the screw. Do not tighten the screw fully: leave about 1 mm between the screw head and the front face of the gear.



Repeat Steps 5 and 6 for the other screws.



At this point in the assembly there should be 1 mm gaps between the heads of the screws (circled in red) and the front face of the gear.



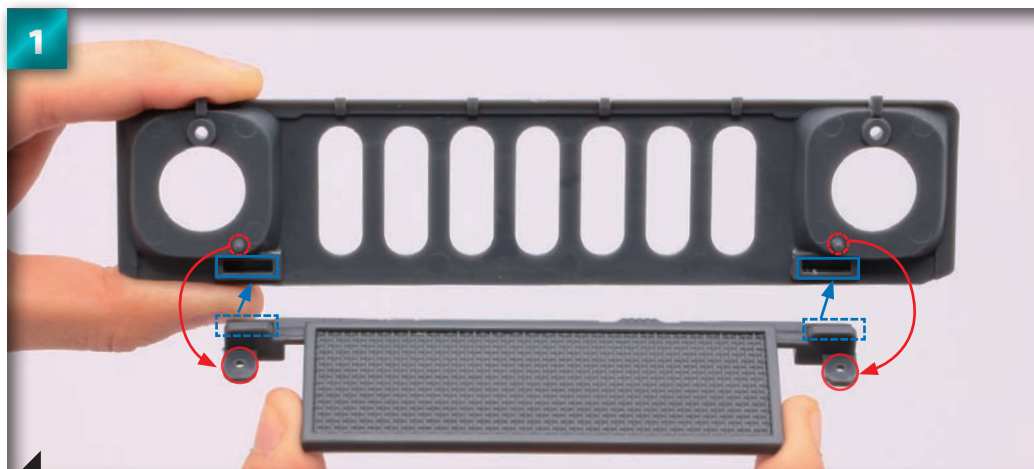
Now tighten the screws into the holes evenly, tightening each screw a little at a time, and working repeatedly around the gear until all the screws are secure.



Your 46T gear assembly should now look like this.

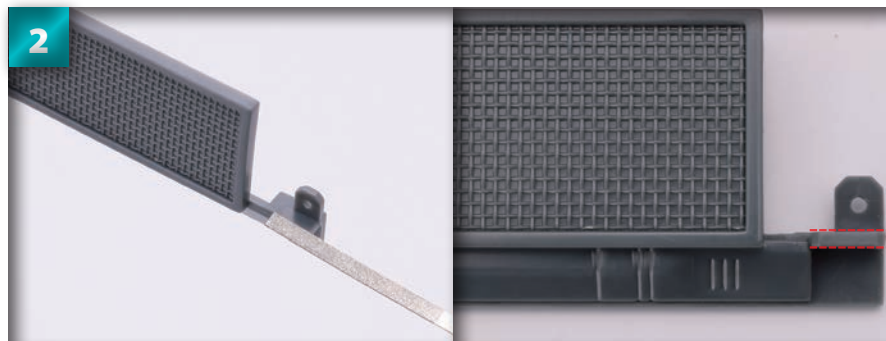
Assembling the front grill

On the rear of the front grill are two pins (circled in dotted red) below the headlight holes, and there are two slots (blue rectangles) below the pins. The pins fit into holes (ringed in red) and the projections (dotted blue rectangles) fit into the slots on the grill. Test-fit these two parts together.



Tip

This step is to just familiarize you with how the parts fit together, so don't glue them at this stage.



If you find the fit is too tight, don't force the parts together: file the top and bottom sides (outlined in red, above right) of the projections on each side of the grill mesh with a file or wet and dry paper (800 grit). Be careful not to file this part too much, as it may become weak.

Assembled parts



This stage of assembly is now complete. At the end of every stage, you should store all parts safely for later use.

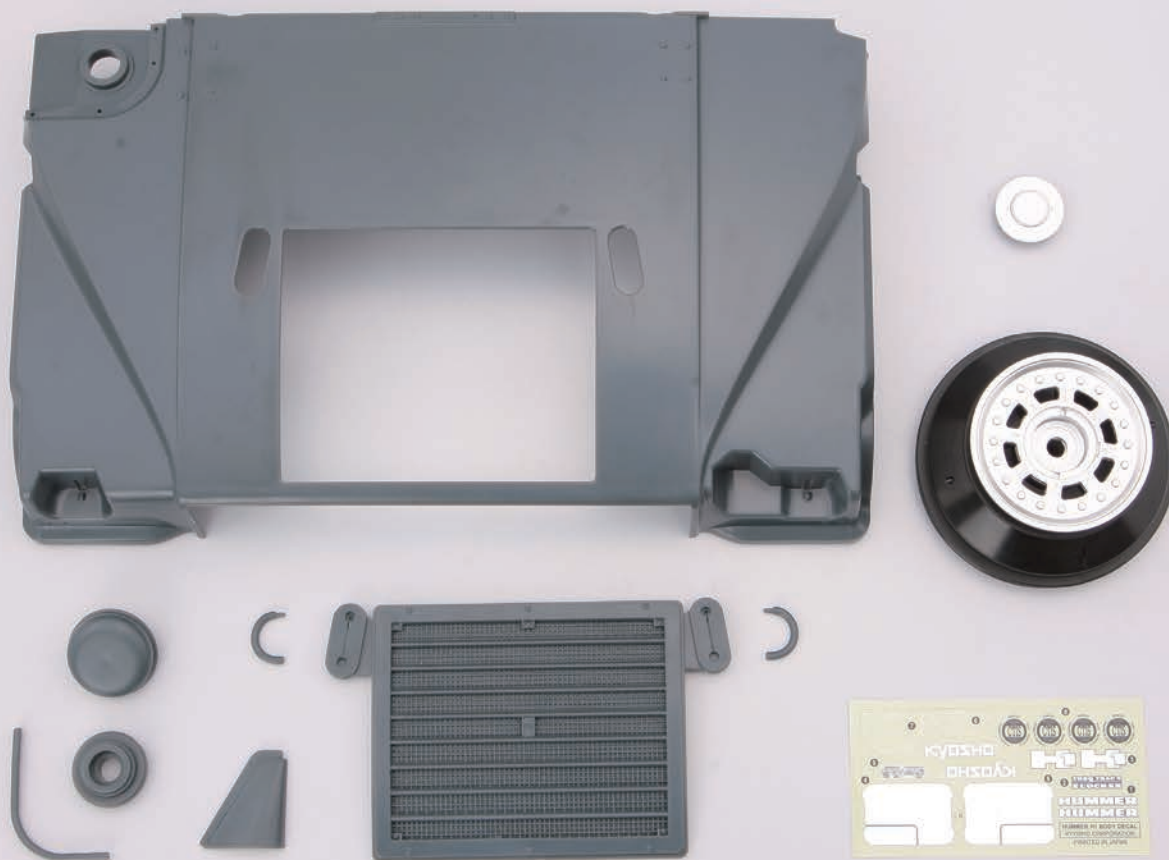
What does the 'T' stand for in '46T'?

The letter 'T' in 46T stands for teeth. And the number before the T, in this case '46', specifies the number of teeth that the gear has. All the gears supplied in this series are named in this way.

Stage 2

Assembling the hood

Your parts



Hood
Air filter cover
Air filter
Air filter gasket
Air intake

Hood hooks × 2
Radiator cover
Hubcap
Wheel
Sticker sheet

Tools and materials

Plastic adhesive
Masking tape
Knife
Scissors
Tweezers

Fitting the front grill to the hood



Carefully remove the front grill mesh from the front grill, temporarily assembled in the previous stage.



Check the area at the front of the hood where the front grill fits, and the six small projections on the front grill, one at each end and four in between them (circled).



Fit the two parts together, engaging the two projections on the front grill with the corresponding recesses on the inside of the hood.



Hold the two parts together and apply adhesive to the seam between them.

Tip

A good adhesive to use when joining these parts together is a low viscosity plastic glue.



Once you have glued the front grill in place, you may want to secure it with masking tape while it dries. When the glue is dry, test-fit the radiator cover in the central opening of the hood.

Installing the radiator cover



Fit the radiator cover into the opening in the center of the hood, from the underside.



Secure the radiator cover with masking tape to prevent it from moving.



Place one of the hood hooks into the oval hole in the hood, inserting the projection into the hole (circled) of the radiator cover.



Fit the second hook on the other side of the hood. If the hooks are inserted too forcefully, the temporarily fitted radiator cover may come loose, so support the cover from behind while fitting the hooks.



Tip

Remove any burrs from the part with a knife before fitting.



Prepare the air filter gasket. The correct orientation for this part is with the longer side toward the front of the hood.

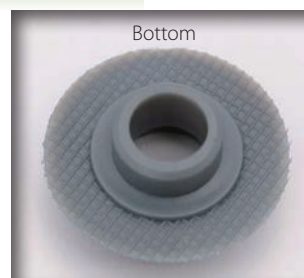


Align the pins on the underside of the gasket with the holes in the hood.

HUMMER H1: STEP BY STEP

Installing the air filter

Before proceeding with the assembly, be sure to identify the two sides of the air filter correctly, as shown here.



Hold the air filter cover so that the cross is facing you, and hold the air filter with its bottom side toward you.



Insert the air filter into the cover, as shown, but do not apply any adhesive.



The air filter assembly fits into the hole next to the gasket.



Carefully push the air filter into place, and secure it temporarily with masking tape.

Applying the stickers



With a pair of scissors or a knife, cut sticker number 8 from the sticker sheet. This sticker will be applied to the hubcap, so be sure to cut around it in a circle.



With tweezers, peel the sticker off the backing and apply it to the center of the hubcap.



Make sure the two depressions on the hubcap (circled) are aligned horizontally with the lettering 'CTIS' on the sticker.

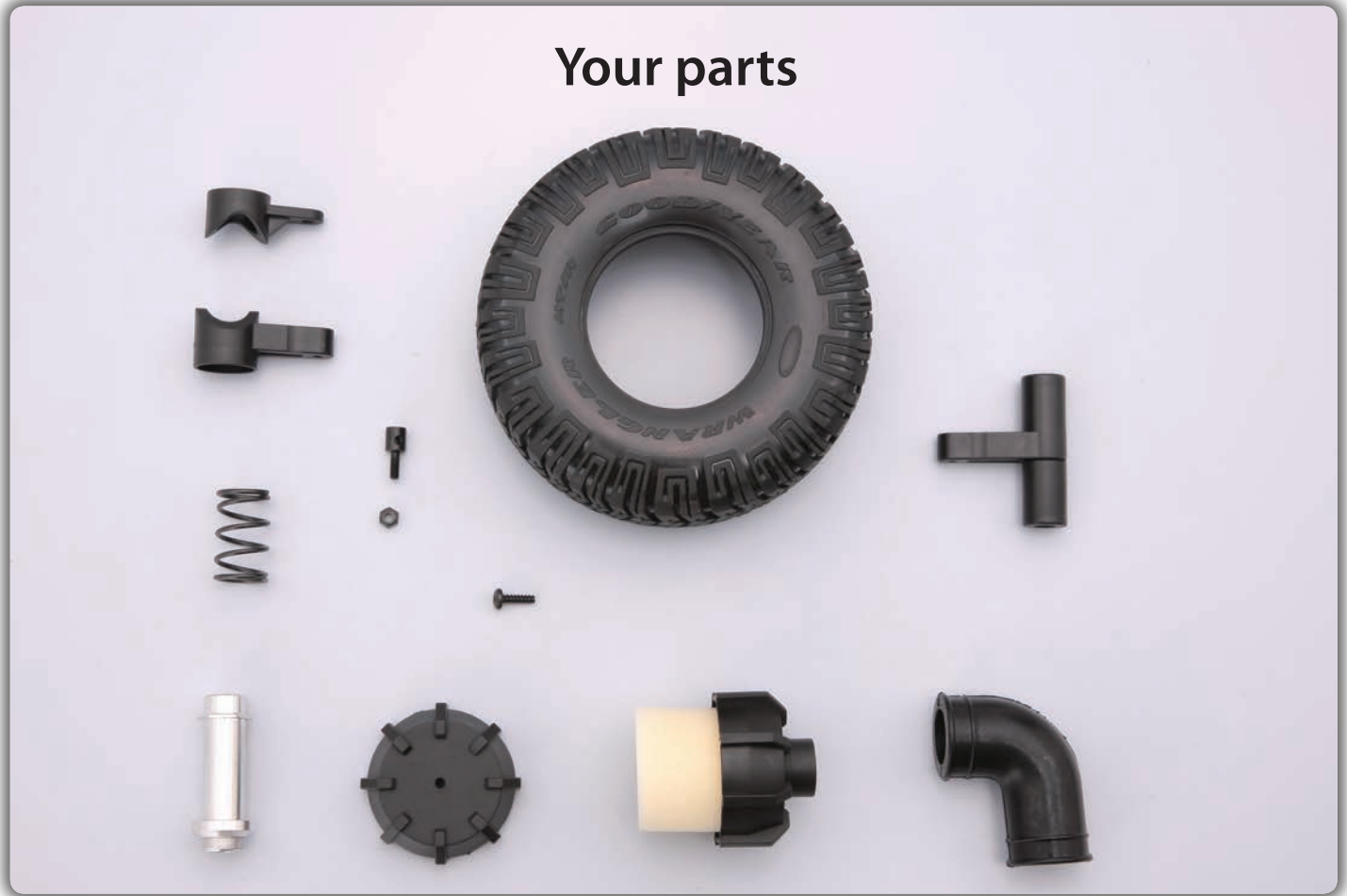
Assembled parts



Stage 3

Assembling the rear left wheel, right servo saver and air filter

Your parts

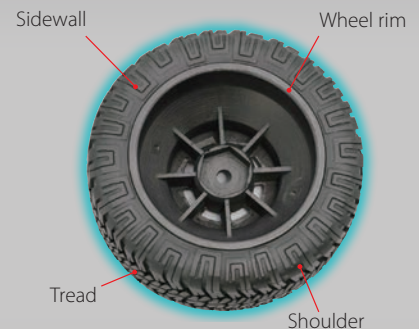


Right servo saver upper arm
Right servo saver lower arm
Servo saver spring
Servo saver shaft and adjuster
3mm rod stopper
3mm nylon nut
Tire
3 × 10mm self-tapping screw
Air filter cover
Air filter base and element

Left servo saver upper and lower parts
Air pipe

Tire & Wheel

Familiarize yourself with the different parts of the wheel and tire, as they will be referred to in the steps.



Tools and materials

Pliers
Wet and dry paper (600 grit)
Instant adhesive
Phillips screwdriver

Assembling the wheel



1 Wash the tire with some dishwashing soap, paying especially close attention to the areas that will be in contact with the wheel rims.



2 While waiting for the tire to dry, use wet and dry paper to remove the paint from the rims of the wheel (which was provided in Stage 1). This will help with adhesion.



3 Hold the tire and wheel, as shown. The wheel must enter the tire through the wider hole.



4 Insert the wheel into the tire.



5 Working around the wheel, pull the shoulder of the tire back slightly to help ease it into the groove on the inside of the rim.



6 Turn the wheel assembly over and position the other side of the tire into the groove on the other side of the wheel.



8 When the glue is dry, turn the wheel assembly over and repeat Step 7 for the other side.



7 Ease the sidewall back a little, creating a small gap between the tire and the wheel rim, then squeeze a small amount of instant adhesive into the gap. See the Tip box on the right for the recommended technique for applying the glue.

Tip

When applying instant adhesive to the wheel, follow the order shown in the photo. This method will secure the wheel to the tire without the tire becoming distorted.



Assembling the servo saver



1 Insert the stopper into the hole in the right servo saver upper arm, as shown.



2 Place the 3mm nut onto the end of the stopper.



3 Tighten the nut onto the stopper with your fingers.



4 Check that your servo saver assembly now resembles the one shown above.



5 Remove the servo saver adjuster from the servo saver shaft.



6 Holding the end of the shaft with the hexagonal projection, insert it into the servo saver hole with the hexagonal recess.



7 Engage the hexagonal projection with the corresponding recess in the hole of the servo saver, as shown.



8 Hold the servo saver shaft and insert it into the servo saver lower arm. The stopper should be oriented as shown in the photograph.



9 Turn the lower arm so it is at a right angle to the upper arm and slot them together.



10 Place the spring over the shaft and into the recess of the lower servo saver arm.



11 Place the servo saver adjuster onto the servo saver spring.



Use the servo saver adjuster to push the spring in, and screw the adjuster onto the end of the shaft.

Tip

If you find it too hard to screw the adjuster on by hand, wrap some tissue around it and then tighten with pliers. Take care not to overtighten it.



Separate the upper and lower parts of the left servo saver, supplied pre-assembled. You will find that the hexagonal end of the upper part fits into a hexagonal hole in the lower part.



Now re-insert the upper left servo saver into the lower. There should not be any gap.

Assembling the air filter



Fit the air filter cover onto the air filter base and element, as shown.



Insert the 3 × 10mm self-tapping screw into the hole in the middle of the air filter cover and tighten slowly with a size 2 Phillips screwdriver.



Fit the air pipe onto the air filter base. If it is difficult to insert, use a little wet and dry paper on the inside of the pipe.



The air filter should now look like the one shown on the left.

Assembled parts





Stage 4

Assembling the side mirrors

Your parts



Aerial
Left side mirror cover
Right side mirror cover
Left side mirror
Right side mirror
Side mirror arms × 2
Side mirror pins × 2

Shock rod assembly
Shock spring spacer
11mm O-ring
3mm O-rings × 2
Stopper ring
2.6mm nut
2.3mm washers × 2

Shock piston
Shock shaft
Shock cap
6.8mm ball end
Shock case
Rear shock spring
Shock spring stopper

Tools and materials

Knife
Tweezers
Stickers (from Stage 2)

HUMMER H1: STEP BY STEP



Hold the left side mirror over the left side mirror cover, as shown above, to identify the projections and holes highlighted by the red arrows.



Fit the projection on each component into its corresponding hole on the other component.



Press down firmly on the mirror, pushing it into the cover.



There is a hole near the base of the mirror cover into which the side mirror arm fits. Use the photo to identify the correct orientation of the two parts.



Insert one of the side mirror arms into the hole in the base of the mirror cover.



Locate the hole in the bottom of the side mirror cover into which the side mirror pin fits.



Insert the side mirror pin into the hole in the bottom of the side mirror cover.

8



The left side mirror is now complete. If there are any burrs around the parts, carefully remove them, using a knife.

9



Engage the projections and holes of the right side mirror and the right side mirror cover.

10



Press down firmly on the mirror, pushing it into the mirror cover.

11



As before, the side mirror arm fits into the hole in the base of the mirror cover.

12



Insert the second side mirror arm into the hole in the base of the mirror cover.

13



Locate the hole in the bottom of the side mirror cover into which the side mirror pin fits.



Insert the side mirror pin into the hole in the bottom of the side mirror cover.



Remove the two mirrors from the sticker sheet provided with Stage 2. The left mirror is labeled 4 and the right mirror 5.



With a pair of tweezers, place mirror sticker 4 into the recess of the left side mirror assembly.



Flatten the mirror into the recess with your fingertips, pushing any air bubbles out as you do so. Then repeat Steps 16 and 17 for the assembled right side mirror and mirror sticker 5.



Stage 5

Beginning the rear differential

Your parts



Differential case
Bevel gear (20T)
Differential cup joint
Bevel gears (10T) × 2
2.5 × 10.3mm pin

12mm shim
6mm O-ring
1510 bearing
Bevel gear shaft
Grease

Tools and materials

Tweezers
Toothpick

Fitting the bearing onto the differential case



Place the 1510 ball bearing over the projection on the differential case.



Press the bearing firmly into position on the projection. Make sure the bearing is aligned with the case.

Assembling the differential gear



Cut a corner from the grease bag and place a small amount of grease onto the end of a toothpick, or similar.



Apply some grease to the recess in the center of the inside of the differential case.



Apply some grease to the differential cup joint.



Insert the joint into the hole, slowly rotating it back and forth to spread the grease.

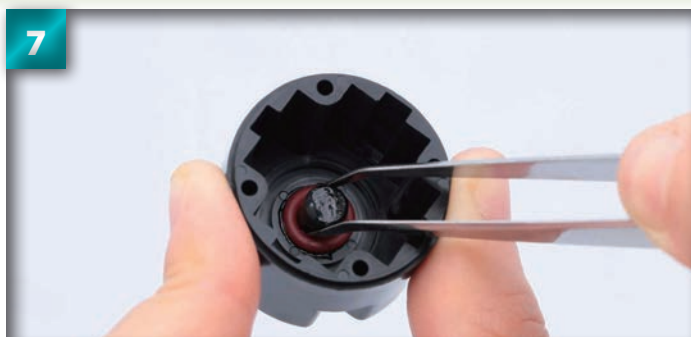


Place the end of the joint into the hole of the projection on the inside of the bearing.



Place the 6mm O-ring over the joint on the inside of the case.

HUMMER H1: STEP BY STEP



Push the O-ring down the joint until it sits in the recess that you greased in Step 2.



Place the 6 × 12mm shim over the joint and push down to rest on the O-ring.



Use tweezers to grip the 2.5mm x 10.3mm pin.



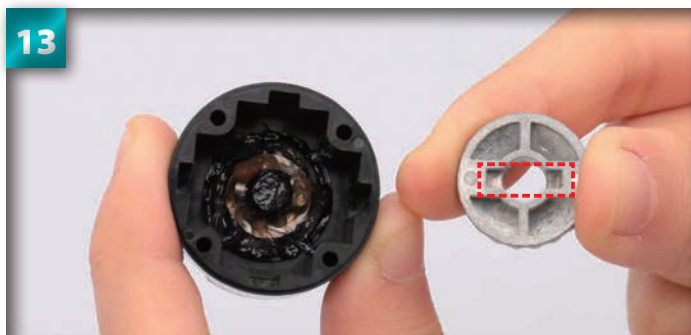
Insert the 2.5 × 10.3mm pin into the hole in the joint, just above the shim.



Adjust the position of the pin so that it protrudes evenly from both sides of the joint.



Smear some extra grease around the shim and the joint.



Hold the 20T bevel gear as shown. Locate the highlighted groove on the back of the gear.



Align the groove on the back of the bevel gear with the position of the pin and insert the gear into the back of the case, sliding it over the joint and the pin.

HUMMER H1: STEP BY STEP



Push the bevel gear down onto the joint until the pin slots into the groove.



Slide a 10T bevel gear onto each end of the bevel gear shaft, as shown.



Insert the bevel gear shaft into the back of the case, fitting it into the grooves on the inside of the case wall.



Spread the two 10T gears apart as far as they will go.



Squeeze a generous amount of grease into the back of the differential case.



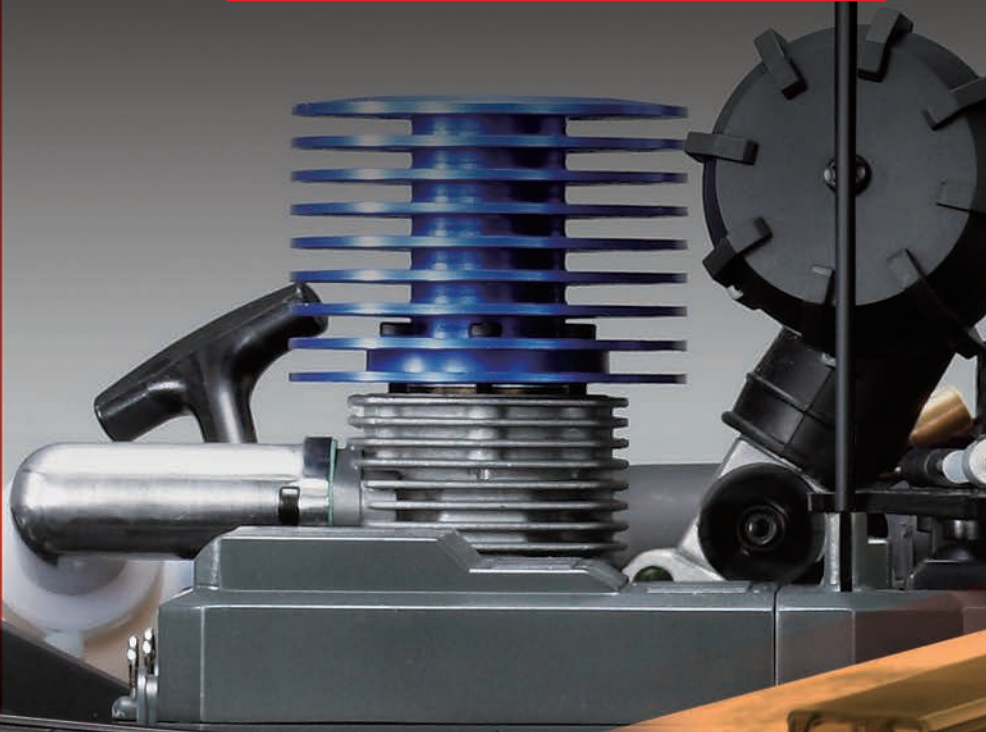
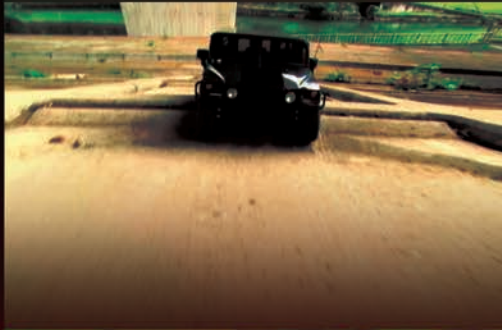
Hold the differential case and slowly turn the joint to spread the grease over the gears.

Assembled parts



Keep the differential case and grease bag in sealed containers or bags to prevent the greased case from attracting dust and the bag from leaking.





HUMMER®

RADIO CONTROL CAR

